Second-Party Opinion

Árborg Municipality Sustainable Bond Framework



Evaluation Summary

Sustainalytics is of the opinion that the Árborg Municipality Sustainable Bond Framework is credible and impactful and aligns with the Sustainability Bond Guidelines 2018, Green Bond Principles 2018, and Social Bond Principles 2020. This assessment is based on the following:



USE OF PROCEEDS The eligible categories for the use of proceeds – Renewable Energy, Waste Management, Energy Efficiency, Terrestrial and Aquatic Biodiversity Conservation, Clean Transportation, Sustainable Water and Wastewater Management, Green Buildings, Access to Essential Services, Affordable Housing, Socio-Economic Advancement and Empowerment – are aligned with those recognized by both the Green Bond Principles and Social Bond Principles. Sustainalytics considers that activities in the eligible categories will lead to positive environmental or social impacts and advance the UN Sustainable Development Goals, specifically SDG 4, 6, 7, 9, 10, and 11.



PROJECT EVALUATION / SELECTION Árborg municipality's internal process of evaluating and selecting projects is managed by the Sustainable Finance Committee (SFC), which is comprised of representatives from Treasury, Environmental departments, Facilities manager, the Municipality's Mayor and Sustainability Experts. The SFC is responsible for confirming alignment with the Framework. Sustainalytics considers the project selection process in line with market practice.



MANAGEMENT OF PROCEEDS Árborg municipality's processes for management of proceeds is overseen by the Finance department. The Municipality will monitor and track the allocation of proceeds through its internal accounting system, using a portfolio approach. Árborg is committed to allocating net proceeds to Eligible Projects within 24 months of the date of issuance. Pending full allocation, unallocated proceeds may be temporarily invested in line with Árborg's liquidity investment guidelines. This is in line with market practice.



REPORTING Árborg municipality intends to report on allocation of proceeds on its website, on an annual basis, until full allocation. In addition, Árborg municipality is committed to reporting on relevant impact metrics. Sustainalytics views Árborg municipality's allocation and impact reporting as aligned with market practice.

Evaluation Date	June 2, 2021
Issuer Location	Árborg, Iceland

Report Sections

Introduction2
Sustainalytics' Opinion3
Appendices11

For inquiries, contact the Sustainable Finance Solutions project team:

Charles Cassaz (Amsterdam)

Project Manager charles.cassaz@sustainalytics.com (+31) 20 205 02 09

Cristhian Veintimilla (Amsterdam)Project Lead

Nilofur Mulla Thakkar (Mumbai)
Project Support

Enrico Tessadro (Amsterdam)

Client Relations susfinance.emea@sustainalytics.com (+44) 20 3880 0193



Introduction

Árborg municipality ("Árborg", or the "Municipality") is the largest municipality in Southern Iceland, with a population of 10,500. Árborg owns, operates or directly supports basic services such as schools, kindergartens, social services such as housing for the elderly, facilities like district heating infrastructure, waste collection treatment, water treatment facilities and more for the municipality's residents. In addition, Árborg manages infrastructure for low-carbon transport, such as bicycling and walking paths.

Árborg has developed the Árborg Municipality Sustainable Bond Framework (the "Framework") under which it intends to issue green, social or sustainability bonds, and use the proceeds to finance and/or refinance, in whole or in part, eligible projects that are expected to have a positive impact on the environment & inhabitants at Árborg thereby promoting sustainable development. The Framework defines eligibility criteria in ten areas:

- Renewable Energy
- 2. Waste Management
- 3. Energy Efficiency
- 4. Biodiversity and Conservation
- 5. Clean Transportation
- 6. Sustainable Water and Wastewater Management
- 7. Green Buildings
- 8. Access to Essential Services
- Affordable Housing
- 10. Socio-Economic Advancement and Empowerment

Árborg engaged Sustainalytics to review the Árborg Municipality Sustainable Bond Framework, dated June 2021, and provide a Second-Party Opinion on the Framework's environmental and social credentials and its alignment with the Green Bond Principles 2018 (GBP), Social Bond Principles 2020 (SBP), and Sustainability Bond Guidelines 2018 (SBG)². This Framework has been published in a separate document.³

Scope of work and limitations of Sustainalytics' Second-Party Opinion

Sustainalytics' Second-Party Opinion reflects Sustainalytics' independent⁴ opinion on the alignment of the reviewed Framework with the current market standards and the extent to which the eligible project categories are credible and impactful.

As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework's alignment with the Sustainability Bond Guidelines 2018, Green Bond Principles 2018, and Social Bond Principles 2020, as administered by ICMA;
- The credibility and anticipated positive impacts of the use of proceeds; and
- The alignment of the issuer's sustainability strategy and performance and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.8.1, which is informed by market practice and Sustainalytics' expertise as an ESG research provider.

As part of this engagement, Sustainalytics held conversations with various members of Árborg's management team to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of the Framework. Árborg representatives have confirmed (1) they understand it is the sole responsibility of Árborg to ensure that the information provided is complete, accurate or up to date; (2) that they have provided Sustainalytics with all relevant information and (3) that any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information.

² The Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines are administered by the International Capital Market Association and are available at https://www.icmagroup.org/green-social-and-sustainability-bonds/sustainability-bond-guidelines-sbg/

¹ The municipality of Árborg, at: https://www.arborg.is/en

³ The Árborg Municipality Sustainable Bond Framework is available on Árborg municipality's website at: https://www.arborg.is/stjornsysla/fjarmal-og-rekstur/sjalfbaer-fjarmal/

⁴ When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics' hallmarks is integrity, another is transparency.



This document contains Sustainalytics' opinion of the Framework and should be read in conjunction with that Framework.

Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and Árborg.

Sustainalytics' Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics' Second-Party Opinion addresses the anticipated impacts of eligible projects expected to be financed with bond proceeds but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework is the responsibility of the Framework owner.

In addition, the Second-Party Opinion opines on the potential allocation of proceeds but does not guarantee the realised allocation of the bond proceeds towards eligible activities.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument, either in favour or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that Árborg has made available to Sustainalytics for the purpose of this Second-Party Opinion.

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Árborg Municipality Sustainable Bond Framework

Sustainalytics is of the opinion that the Árborg Municipality Sustainable Bond Framework is credible, impactful and aligns with the four core components of the SBG, GBP and SBP. Sustainalytics highlights the following elements of Árborg's Sustainability Bond Framework:

Use of Proceeds:

- The eligible categories Renewable Energy, Waste Management, Energy Efficiency, Terrestrial and Aquatic Biodiversity Conservation, Clean Transportation, Sustainable Water and Wastewater Management, Green Buildings, Access to Essential Services, Affordable Housing, and Socio-Economic Advancement and Empowerment are aligned with those recognized by the GBP, SBP, GLP, and SLP. Sustainalytics notes that the expenditures financed under the Framework are expected to generate positive impacts on the environment and inhabitants at Árborg, thereby promoting sustainable development.
- Within Renewable Energy, Árborg may finance and/or refinance the development, construction and operation of electricity generation and heating facilities from geothermal energy, with lifecycle emissions intensity below 100gCO₂/kWh.
- In the Pollution Prevention and Control category, Árborg may finance and/or refinance purchase, development, construction, and operation of facilities for waste prevention, reduction, recycling, sorting and reuse. Expenditures include the provision of waste bins to households for waste segregation.
- Regarding Energy Efficiency, Árborg may finance and/or refinance the installation of LED street lighting, and energy efficiency measures in 100% renewable energy systems, including: (i) district heating and energy recovery and storage, (ii) electricity grids, and (iii) smart metering. District heating financing includes generation facilities and distribution infrastructure solely powered by renewables.
- Under Terrestrial and Aquatic Biodiversity Conservation, Árborg may finance and/or refinance the purchase of natural areas and parks designated for free public access.
- Within Clean Transportation, Árborg may finance and/or refinance investments in clean transportation infrastructure. Eligible expenditures include walking and cycling paths, and electric vehicle charging stations.



- Regarding Sustainable Water and Wastewater Management, Árborg may finance and/or refinance drinking water distribution, infrastructure powered by renewable energy, and wastewater collection and treatment infrastructure.
- Withing Green Buildings, Árborg may finance and/or refinance the construction and/or refurbishment of public, commercial and private buildings with the following minimum certification levels: LEED "Gold", BREEAM "Very Good", and Nordic Swan. Sustainalytics considers BREEAM Excellent to be aligned with market practice and encourages Árborg to select BREEAM-certified buildings that score 70 in the Energy category (which Sustainalytics regards as the most important one) to fulfill the requirements for BREEAM Excellent in that category.⁵ For Sustainalytics' assessment of these certification schemes, please refer to Appendix 1.
- In the Access to Essential Services category, Árborg may finance and/or refinance the construction, purchase or development of: (i) public schools and other educational services accessible to all, (ii) housing for low-income⁶ elderly populations (67 or older), (iii) subsidized⁷ and universally accessible healthcare services and (iv) subsidized kindergartens accessible to all.
- Regarding Affordable Housing, Árborg may finance and/or refinance the construction, purchase, maintenance or development of affordable housing projects for low-income⁶ or marginalized populations (who meet the low-income definition).⁶ The Framework also defines eligibility for equity investments in a non-profit housing association exclusively servicing low-income households, with monthly incomes below ISK 535.000 per person,⁸ and whose rent expenditures will not exceed 30% of total income. Sustainalytics notes that, while the GBP and SBP prefer project financing and that there is, in general, less transparency associated with reporting on non-project-based financing, Sustainalytics recognizes the Issuer's commitment to robust and transparent reporting on positive outcomes achieved by its financing activities.
- Within Socioeconomic Advancement and Empowerment, Árborg may finance and/or refinance the construction, purchase, maintenance or development of publicly accessible sporting facilities. Árborg has indicated that outdoor facilities are completely free and open access, while indoor facilities are subsidized for children aged 5 to 17.

Project Evaluation and Selection:

- Árborg's internal process in evaluation and selecting projects is managed by the Sustainable Finance Committee (SFC), which is comprised of representatives from Treasury, Environmental departments, Facilities manager, the Municipality's Mayor and Sustainability Experts. The process follows four steps: (i) the Finance department outlines the Municipality's general budget, which includes a selection of all projects to be financed within the Municipality's four-year budget plan, (ii) the Finance department conducts an alignment assessment of the proposed investments according to the criteria established in the Framework, (iii) the SFC is responsible for confirming alignment with the Framework, and (iv) the Finance department will keep a list of financed projects linked to the Framework.
- Based on these elements, Sustainalytics considers this process to be in line with market practice.

Management of Proceeds:

 Árborg's process for management of proceeds is overseen by the Finance department. The Municipality will monitor and track the allocation of proceeds through its internal accounting system, using a portfolio approach. Árborg is committed to allocating net proceeds to Eligible

⁵ Sustainalytics notes the specific context of Iceland where the grid factor is close to 0 tCO₂/GWh and where geothermal water is used to heat around 90% of the country's residential buildings. Given the context, minimizing upstream emissions in construction, and waste may lead to higher environmental benefits than tackling energy-related emissions. For more information, please refer to https://www.irena.org/IRENADocuments/Statistical_Profiles/Europe/Iceland_Europe_RE_SP.pdf

⁶ Annual income not exceeding ISK 4,274,100 per person and ISK 712,200 for each child up to the age of 18 who lives in the home, and ISK 6,466,256 for married/cohabiting/individuals in confirmed cohabitation, according to the Rules on social rental apartments in the Municipality of Árborg. For more information please refer to: <a href="https://www.arborg.is/stjornsysla/stjo

⁸ Sustainalytics notes that the income threshold established by Arborg municipality is below the national monthly median salary (ISK 665,000), for more information please refer to: https://px.hagstofa.is/pxis/pxweb/is/Samfelag_Samfelag_Iaunogtekjur_1_laun_1_laun/VIN02004.px/?rxid=e73f5711-b563-4422-a989-f21f5415d592



Projects within 24 months of the date of issuance. Pending full allocation, unallocated proceeds may be temporarily invested in line with Árborg's liquidity investment guidelines. Should any asset cease to meet the eligibility criteria established in the Framework, Árborg will reallocate the bond proceeds to other eligible projects. Based on these elements, Sustainalytics considers this process to be in line with market practice.

Reporting:

Árborg is committed to reporting on the allocation and impact of proceeds via its Impact Report which will be available on the Municipality's website, updated on an annual basis until allocation has been fully completed. The allocation reporting will include details such as outstanding amount of sustainable bond issuances, total amount allocated to eligible projects in each category, balance of unallocated proceeds, and share of financing vs. refinancing. In addition, Árborg will, where possible, report on relevant impact indicators including, annual GHG emissions avoided, annual absolute amount of wastewater treated, and number of affordable housing units built. For an exhaustive list of impact metrics, please refer to Appendix 2: Green Bond/Green Bond Programme External Review Form. Based on these elements, Sustainalytics considers this process to be in line with market practice.

Alignment with Sustainability Bond Guidelines 2018

Sustainalytics has determined that the Árborg Municipality Sustainable Bond Framework aligns with the four core components of the GBP and SBP. For detailed information please refer to Appendix 2: Sustainability Bond/ Sustainability Bond Programme External Review Form.

Section 2: Sustainability Strategy of Árborg

Contribution of Framework to Árborg municipality's sustainability strategy

In 2020, Árborg published its Environmental Policy⁹ to guide the continuous improvement of Árborg's environmental performance. The Policy demonstrates Árborg's commitment to sustainable development and outlines specific goals, and actions focused on four key sustainability areas: (i) climate change (ii) transportation (iii) nature conservation, forestry and land quality and (iv) waste. Árborg's environmental policy is aligned with the United Nations SDGs.

- Under climate change, Árborg aims to reach carbon neutrality by 2030.³ Árborg has identified 3 actionable strategies to achieve this goal, which include a climate action plan, calculation of carbon footprint based on Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC)¹⁰ from 2021 and climate education of citizens and operators in Árborg municipality.⁹
- To promote clean transportation, Árborg municipality is committed to transition to fully renewable energy powered vehicle fleet before 2025.9 Currently 12.5% of Árborg municipality owned vehicle fleet is electric powered.11 Until the year 2024, it is estimated that 31 km of walking and cycling paths will be constructed in Árborg.11 In 2020, the number of charging stations for electric vehicles will be increased from the existing five units.9
- For conservation of nature and to enhance biodiversity, Árborg will develop a nature conservation
 plan and support research related to biodiversity, distribution of invasive and endangered species.⁹
- As of 2021, only 0.2 % of the municipal waste ends up in the landfill, surpassing the target of 5%.9
 For further waste prevention Árborg supports increased sorting at source, recycling and incorporating the "polluter pays" principle into waste management fees. The Municipality also plans to build a two-stage sewage treatment plant for wastewater treatment.9

Given the above, Sustainalytics notes that the activities financed via the Framework will support Árborg municipality's environmental goals as outlined in the policy.

Árborg's efforts to enhance the wellbeing of the community are supported by various social policies, 13 which are focused on social inclusion, empowerment and equality. Árborg municipality social services strive to

⁹ The municipality of Arborg, "Arborg Municipality's Environmental Policy", (2020) at: https://www.arborg.is/stjornsysla/stjornkerfi/stefnur/

¹⁰ Greenhouse Gas Protocol, "About", at: https://ghgprotocol.org/about-us

¹¹ Arborg municipality has shared this information with Sustainalytics.

¹² Government of Iceland, "Waste treatment", at: https://www.government.is/topics/environment-climate-and-nature-protection/waste-treatment-/

¹³ The municipality of Arborg, "Policies", at: https://www.arborg.is/stjornsysla/stjornkerfi/stefnur/



enhance independent living for its senior citizens by providing social rental apartments.¹⁴ Additionally, Árborg provides social rental apartments¹⁴ for other adult citizens who require housing assistance due to their socio-economic situations.⁶ For its young residents,¹⁵ Árborg owns, operates and directly supports kindergartens, primary schools and sporting facilities. All the educational services are based on Árborg's Education Policy.¹³ The education policy emphasize ensuring universal access to school education, well-being of students and staff, student democracy, diverse study paths and many more.¹³

Árborg municipality provides leisure time grants to low-income families,¹⁶ to ensure that all children can participate in constructive leisure activities regardless of financial or social backgrounds. Therefore, the allocation of proceeds towards social categories may support Árborg in providing public and social services to improve the wellbeing of the inhabitants.

Sustainalytics is of the opinion that the Árborg Municipality Sustainable Bond Framework is aligned with Árborg's overall sustainability strategy and initiatives and will further the Municipality's action on its key environmental and social priorities.

Well-positioned to address common environmental and social risks associated with the projects

While Sustainalytics recognizes that the use of proceeds from the framework will be directed towards eligible projects that are expected to have positive environmental and social impact, Sustainalytics is aware that such eligible projects could also lead to negative environmental and social outcomes. Some key environmental and social risks associated with the eligible projects, could include land use and biodiversity issues associated with large scale infrastructure development, emissions, effluents, data protection and community relations.

Sustainalytics is of the opinion that Árborg is able to manage and/or mitigate potential risks through implementation of the following:

- According to Icelandic legislation,¹⁷ all hydropower and geothermal projects must follow the country's Master Plan for Nature Protection and Energy Utilization.¹⁸ Furthermore, all large-scale power plants must undergo an Environmental Impact Assessment.¹⁹
- To manage associated risk with land use and land quality, Árborg will conduct land quality mapping and formulate a land use action plan that aims to prevent further disturbance of the environment and restore what has been distorted.
- The Icelandic regulation on sewage management is an adaptation of the EU directive 91/271/EEC.²⁰ The directive aims to protect the environment and surface waters from the adverse effects of wastewater discharges, such as oxygen-consuming organic pollution, which degrades aquatic life, and microbiological contamination with pathogens. To comply with the regulation, Árborg plans to set up a two-stage treatment plant which will take care of all sewage and release after cleaning.⁹
- In Iceland, wastewater treatment projects are subject to assessment according to item 11.04 in Annex 1 of the Act on Environmental Impact Assessment no. 106/2000. Árborg will carry out an environmental assessment study to understand the overall environmental impact of the sewage treatment plant for the following parameters: water quality receptors, ecosystem receptors, odor nuisance, visual effects, outdoor activities, vegetation, bird life, archeology, land use and resource utilization. ²¹
- Iceland is identified a "Designated Country" under the Equator Principles, implying the presence of robust environmental and social governance systems, legislation, and institutional capacity for protecting the environment and communities.²²

Based on these policies, standards and assessments, Sustainalytics is of the opinion that Árborg has implemented adequate measures and is well-positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories.

¹⁴ The municipality of Arborg, "Rules on social housing", at: https://www.arborg.is/ibuar/velferd/eldri-borgarar/busetukostir/ibudir-fyrir-aldrada/

¹⁵ Parents of most kindergarten children are between 20-35 years old.

¹⁶ Families of children born 2005 - 20014, living in homes where the average income of supporters, individuals, married or in registered partnership, was lower than 740.000 ISK per month between March and July 2020. For more information please refer to: https://island.is/en/support-for-childrens-recreational-activities

¹⁷ National Energy Authority of Iceland, Legal and Regulatory Framework" at: https://nea.is/geothermal/legal-and-regulatory-framework/

¹⁸ National Energy Authority of Iceland, "Master Plan" at: https://nea.is/geothermal/master-plan/

¹⁹ Icelandic Law on Environmental Impact Assessment 2000 106/2000 at: https://www.althingi.is/lagas/nuna/2000106.html

²⁰ Urban WasteWater Treatment in Europe, at: <a href="https://www.eea.europa.eu/data-and-maps/indicators/urban-waste-water-treatment/urban-waste-water-treatment-assessment-5#:~:text=The%20UWWT%20Directive%20(91%2F271,EU%2D15%20countries%20by%202005.

²¹ Sewage Cleaning Plant at Selfoss Initial Assessment Report at : https://www.skipulag.is/media/attachments/Umhverfismat/1488/201910003-Hreinsist%C3%B6%C3%B0%20Selfossi.pdf

²² Equator Principles, "Designated Countries", at: https://equator-principles.com/designated-countries/



Section 3: Impact of Use of Proceeds

All ten use of proceeds categories are aligned with those recognized by GBP or SBP. Sustainalytics has focused on three below where the impact is specifically relevant in the local context.

Importance of renewable energy for electricity and heating in Iceland

Iceland's power sector is almost entirely carbon-free. In 2018, renewables accounted for 99.9% of the electricity generated in Iceland, the EU27 average being 32.1% in the same year. 23 In 2018, hydropower accounted for 70% of electricity output, while geothermal power accounted for the rest. Electricity and heat production accounted for only 0.1% of the energy sector's total emissions in 2018. The carbon intensity of power production in Iceland stood at $9.3 \text{gCO}_2/\text{kWh}$ in 2016, compared to $441 \text{gCO}_2/\text{kWh}$ in the Netherlands, or an average of $287 \text{gCO}_2/\text{kWh}$ in the EU27 in 2018.

The country's geological characteristics favour the utilisation of geothermal energy, making Iceland the seventh leading country in the world for electricity production form geothermal,²⁴ and the leading country in terms of share of electricity produced from geothermal.²⁵ The share of geothermal energy in the primary energy supply of Iceland stands at 69%, covering 90% of all energy used for space heating. Árborg aims at developing geothermal energy resources to meet electricity and heating demand, especially low enthalpy geothermal resources for district heating. The low enthalpy geothermal resource corresponds to reservoir temperature of less than 150°C²⁶ which are used mainly to supply hot water for district heating.²⁷ Given this context, Sustainalytics notes that the projects financed by Árborg may help maintain Iceland's high portion of clean energy sources in electricity generation and district heating.

Importance of Clean Transportation in Iceland

Most of Iceland's power supply comes from renewable sources; however, the country is still primarily reliant on fossil fuel sources for transportation.²⁸ Emissions from the transport sector have accounted for approximately half of the energy sector's total GHG emissions in Iceland in recent years and road transport has historically accounted for approximately 95% of the emissions in the transport sector. It is worth nothing that road transportation alone is responsible for approximately 20% of Iceland's total emissions.²⁹ Emissions from road transport were projected to peak in 2020 and steadily decline after that, dropping below 1990 levels by 2035. By 2025, it is expected that approximately 20% of all road vehicles will be electric, rising to 55 % by 2035.

Under the Paris Agreement, Iceland has pledged to reduce national GHG emissions by 40% by 2030, compared to 1990 levels. In addition, Iceland aims to become carbon neutral before 2040.30 The Government of Iceland released a Climate Action Plan for 2018-2030 that provides measures to foster clean transportation including government support for charging stations and other infrastructure for electrical transport, tax incentives for the purchase of electric cars, and support for public transport and bicycling.30

Árborg municipality will focus on financing clean transportation projects such as EVs charging points and walking and cycling paths, that could foster a shift towards clean transportations modes of transport. Sustainalytics notes that these projects can help Iceland in achieving its GHG emissions targets and will further the Country's efforts on its key environmental priorities.

²³ European Commission, "The average share of electricity from renewable energy sources in the EU", (2020), at: <a href="https://ec.europa.eu/eurostat/documents/38154/4956088/The+average+share+of+electricity+from+renewable+energy+sources+in+the+EU+%282004-2018%29/d1c3737c-769a-4b7c-4c7b-ae82d27cc6b5

²⁴ Paulillo, A., et al., (2019), "The environmental impacts and the carbon intensity of geothermal energy: A case study on the Hellisheiði plant", Environment international, at: https://www.sciencedirect.com/science/article/pii/S0160412019318689

²⁵ Nordic Energy Research, "Iceland: Worlds highest share of geothermal power", at: https://www.nordicenergy.org/figure/two-thirds-renewable/worlds-highest-share-of-geothermal-power/

²⁶ Helmholtz-Zentrun Potsdam, (2011), at: https://geothermalcommunities.eu/assets/elearning/1.15.1106.pdf

²⁷ Árni Ragnarsson, Benedikt Steingrímsson and Sverrir Thorhallsson, Iceland GeoSurvey, "Geothermal Country Update for Iceland", Proceedings, 7th African Rift Geothermal Conference (2018), at: http://theargeo.org/fullpapers/C7/Geothermal%20Country%20Update%20for%20Iceland.pdf

²⁸ United Nations, "Iceland's Sustainable Energy Story: A Model for the World?", at https://www.un.org/en/chronicle/article/icelands-sustainable-energy-story-model-world

²⁹ Ministry of the Environment and Natural Resources, "Iceland's Climate action Plan for 2018-2030", (2018), at https://www.government.is/library/Files/Icelands%20new%20Climate%20Action%20Plan%20for%202018%202030.pdf

Ministry of the Environment and Natural Resources , "Iceland's Forth Biennial Report under UNFCCC", (2020), at: https://unfccc.int/sites/default/files/resource/27538601_lceland-null-2020-lcelands%20Fourth%20Biennial%20Report.pdf



Increasing access to essential services

Education

The education system in Iceland has been decentralized to a large extent regarding responsibilities and decision-making. Municipalities are responsible for pre-primary and compulsory education.³¹ The compulsory education (primary and lower secondary level) in Iceland lasts 10 years, generally from age 6 to 15.³² Education in Iceland has traditionally been delivered by public institutions, and there are relatively few private institutions in the school system.

Compulsory education in Iceland is provided for free. Kindergarten is non-compulsory education and attracts a fee.³³ In 2018, the compulsory education net enrollment rate was 99.9% for primary education and 92.1% for secondary education.³⁴ However, in 2017, the enrollment rates in kindergarten were 97% for three- to five-year-old, 95% for two-year-old, and 47% for one-year-old.³⁵ Within the Framework, Árborg municipality aims at financing the provision of kindergarten services at a subsidized fee for the public. Furthermore, the Municipality intends to grant additional subsidies for low-income groups to increase their access to kindergarten services, which is why Sustainalytics considers the education-related projects impactful.

Healthcare

Health spending per capita in Iceland is similar to the average in the EU. Public expenditure accounted for 82 % of health expenditure in 2017, slightly above the EU average of 79%. The health system in Iceland is mostly publicly funded, covering all residents, with a partly integrated purchaser-provider relationship (a tax-based, state-run system). If expectancy at birth in Iceland increased by nearly three years between 2000 and 2017 to reach 82.6 years, almost two years above the EU average. Mortality from treatable causes of death in Iceland was lower in 2016 than in any EU country (preventable causes of mortality for Iceland was 139 as compared to 161 for EU per 100,000 population).

Everyone who has been legally residing in Iceland for six months automatically becomes a member of the Icelandic health insurance system. Nonetheless, in 2016, approximately 3% of people reported unmet needs for healthcare for financial reasons or from other barriers, such as proximity or waiting time. In addition, disparities exist in the rate of unmet needs. 5% of the people among the lowest income quintile reported unmet needs, which is more than double compared to those in the highest income quintile (2% of unmet needs). The disparity by income group is wider than in any other Nordic country.³⁶

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 by the United Nations General Assembly and form an agenda for achieving sustainable development by the year 2030. The bond issued under the Árborg Municipality Sustainable Bond Framework advances the following SDG goals and targets:

Use of Proceeds Category	SDG	SDG target
Renewable Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
Pollution prevention and control	6. Ensure availability and sustainable management of water and sanitation for all	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

³¹ OECD, "Education Policy Outlook - Iceland", (2016), at: https://www.oecd.org/iceland/Education-Policy-Outlook-Country-Profile-Iceland.pdf

³² https://www.government.is/topics/education/

³³ The fee usually ranges from 10-15% of costs but in some municipalities the service is provided for free.

³⁴ UNESCO Statistics – Iceland, 2018, at: http://uis.unesco.org/en/country/is

³⁵ Government of Iceland, "Iceland's implementation of the 2030 Agenda for Sustainable Development", June 2019, at: https://sustainabledevelopment.un.org/content/documents/23408VNR_Iceland_2019_web_final.pdf

³⁶ State of Health in the EU - Iceland, 2019, at: https://ec.europa.eu/health/sites/default/files/state/docs/2019_chp_is_english.pdf



11. Make cities and human settlements inclusive, safe, resilient and sustainable	11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
7. Ensure access to affordable, reliable, sustainable and modern energy for all	7.3 By 2030, double the global rate of improvement in energy efficiency
11. Make cities and human settlements inclusive, safe, resilient and sustainable	11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities
11. Make cities and human settlements inclusive, safe, resilient and sustainable	11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
6. Ensure availability and sustainable management of water and sanitation for all	6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
11. Make cities and human settlements inclusive, safe, resilient and sustainable	11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
10. Reduce inequality within and among countries	10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status
	7. Ensure access to affordable, reliable, sustainable and modern energy for all 11. Make cities and human settlements inclusive, safe, resilient and sustainable 11. Make cities and human settlements inclusive, safe, resilient and sustainable 11. Make cities and human settlements inclusive, safe, resilient and sustainable 6. Ensure availability and sustainable management of water and sanitation for all 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all 11. Make cities and human settlements inclusive, safe, resilient and sustainable 10. Reduce inequality within

Conclusion

Árborg has developed the Árborg Municipality Sustainable Bond Framework under which it may issue sustainability bonds and use the proceeds to finance a wide range of projects, including renewable energy added capacities, energy efficiency solutions, affordable housing, or education and healthcare services.

Árborg Municipality Sustainable Bond Framework



Sustainalytics considers that the projects funded by the sustainability bond proceeds are expected to generate positive impacts on the environment & inhabitants at Árborg, thereby promoting sustainable development.

The Árborg Municipality Sustainable Bond Framework outlines a process by which proceeds will be tracked, allocated, and managed, and commitments have been made for reporting on the allocation and impact of the use of proceeds. Furthermore, Sustainalytics believes that Árborg Municipality Sustainable Bond Framework is aligned with the overall sustainability strategy of the Municipality and that the use of proceeds categories will contribute to the advancement of the UN Sustainable Development Goals 4, 6, 7, 9, 10, and 11. Additionally, Sustainalytics is of the opinion that Árborg has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects funded by the use of proceeds.

Based on the above, Sustainalytics is confident that Árborg municipality is well-positioned to issue sustainability bonds and that that Árborg Municipality Sustainable Bond Framework is robust, transparent, and in alignment with the four core components of the Green Bond Principles (2018), Social Bond Principles (2020) and Sustainability Bond Guidelines (2018).



Appendices

Appendix 1: Certification Schemes for Green Buildings

	BREEAM	LEED	Nordic Swan
Background	BREEAM (Building Research Establishment Environmental Assessment Method) was first published by the Building Research Establishment (BRE) in 1990. Based in the UK. Used for new, refurbished and extension of existing buildings.	Leadership in Energy and Environmental Design (LEED) is a US Certification System for residential and commercial buildings used worldwide. LEED was developed by the non-profit U.S. Green Building Council (USGBC).	Svanen is owned by "Ecolabelling Sweden", a Swedish state company responsible for both the Swan ecolabel and the EU Ecolabel. Svanen was first released in 1989 by the Nordic Council of Ministers.
Certification levels	Pass Good Very Good Excellent Outstanding	CertifiedSilverGoldPlatinum	Certified
Areas of Assessment	 Energy Land Use and Ecology Pollution Transport Materials Water Waste Health and Wellbeing Innovation 	 Energy and atmosphere Sustainable Sites Location and Transportation Materials and resources Water efficiency Indoor environmental quality Innovation in Design Regional Priority 	 General requirements Resource efficiency Indoor environment Chemicals and materials Construction Management Regulatory requirements Point-score requirements (including energy)
Requirements	Prerequisites depending on the levels of certification and credits with associated points This number of points is then weighted by item ³⁷ and gives a BREEAM level of certification, which is based on the overall score obtained (expressed as a percentage). Majority of BREEAM issues are flexible, meaning that the client can choose which to comply with to build their BREEAM performance score. BREEAM has two stages/ audit reports: a 'BREEAM Design Stage' and a 'Post Construction Stage', with different assessment criteria.	Prerequisites independent of level of certification, and credits with associated points. These points are then added together to obtain the LEED level of certification There are several different rating systems within LEED. Each rating system is designed to apply to a specific sector (e.g. New Construction, Major Renovation, Core and Shell Development, Schools/Retail-/Healthcare New Construction and Major Renovations, Existing Buildings: Operation and Maintenance).	Points-based assessment. For apartment buildings at least 17 out of 44 possible points must be achieved. For small houses at least 16 out of 42 possible points must be achieved. For pre-school and school buildings at least 15 out of 39 possible points must be achieved.
Performance display	Pus Oditarding	<u>@</u> <u>@</u> <u>@</u>	SE SNAN ECO

³⁷ BREEAM weighting: Management 12%, Health and wellbeing 15%, Energy 19%, Transport 8%, Water 6%, Materials 12.5%, Waste 7.5%, Land Use and ecology 10%, Pollution 10% and Innovation 10%. One point scored in the Energy item is therefore worth twice as much in the overall score as one point scored in the Pollution item

11



Qualitative	Used in more than 70	Widely recognized	Widely recognized within
Considerations	countries: Good adaptation to the local normative context. Predominant environmental focus. BREEAM certification is less strict (less minimum thresholds) than HQE and LEED certifications.	internationally, and strong assurance of overall quality.	the region, strong assurance of quality.

Appendix 2: Sustainability Bond / Sustainability Bond Programme - External Review Form

Section 1. Basic Information

Please refer to Evaluation Summary above.

Issuer name:		Árborg municipality			
Sustainability Bond ISIN or Issuer Sustainability Bond Framework Name, if applicable:		Árborg Municipality Sustainable Bond Framework			
Rev	iew provider's name:	Sustai	nalytics		
Completion date of this form: June 2, 2021		2, 2021			
Pub	lication date of review publication:				
Sec	tion 2. Review overview				
SCOP	PE OF REVIEW				
The fo	ollowing may be used or adapted, where appropr	iate, to s	summarise the scope of the review.		
The re	eview assessed the following elements and conf	irmed th	eir alignment with the GBP and SBP:		
×	Use of Proceeds	\boxtimes	Process for Project Evaluation and Selection		
\boxtimes	Management of Proceeds		Reporting		
ROLE	(S) OF REVIEW PROVIDER				
\boxtimes	Consultancy (incl. 2 nd opinion)		Certification		
	Verification		Rating		
	Other (please specify):				
	Note: In case of multiple reviews / different pr	oviders,	please provide separate forms for each review		
EXEC	UTIVE SUMMARY OF REVIEW and/or LINK TO F	ULL RE\	IIEW (if applicable)		



Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section (if applicable):

The eligible categories for the use of proceeds – Renewable Energy, Waste Management, Energy Efficiency, Terrestrial and Aquatic Biodiversity Conservation, Clean Transportation, Sustainable Water and Wastewater Management, Green Buildings, Access to Essential Services, Affordable Housing, Socio-Economic Advancement and Empowerment – are aligned with those recognized by both the Green Bond Principles and Social Bond Principles. Sustainalytics considers that activities in the eligible categories will lead to positive environmental or social impacts and advance the UN Sustainable Development Goals, specifically SDG 4, 6, 7, 9, 10, and 11.

	Use	of proceeds categories as per GBP:			
	\boxtimes	Renewable energy	\boxtimes	Energy efficiency	
	\boxtimes	Pollution prevention and control		Environmentally sustainable management of living natural resources and land use	
	\boxtimes	Terrestrial and aquatic biodiversity conservation	\boxtimes	Clean transportation	
	\boxtimes	Sustainable water and wastewater management		Climate change adaptation	
		Eco-efficient and/or circular economy adapted products, production technologies and processes		Green buildings	
		Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs		Other (please specify):	
If applicable please specify the environmental taxonomy, if other than GBPs:					
	Use	of proceeds categories as per SBP:			
		Affordable basic infrastructure	\boxtimes	Access to essential services	
	\boxtimes	Affordable housing		Employment generation (through SME financing and microfinance)	
		Food security	⊠	Socioeconomic advancement and empowerment	
		Unknown at issuance but currently expected to conform with SBP categories, or other eligible areas not yet stated in SBP		Other (please specify):	

If applicable please specify the social taxonomy, if other than SBP:



2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

Árborg municipality's internal process of evaluating and selecting projects is managed by the Sustainable Finance Committee (SFC), which is comprised of representatives from Treasury, Environmental departments, Facilities manager, the Municipality's Mayor and Sustainability Experts. The SFC is responsible for confirming alignment with the Framework. Sustainalytics considers the project selection process in line with market practice.

pruc	Alloc.					
Eval	uation and selection					
\boxtimes	Credentials on the issuer's social and green objectives		Documented process to determine that projects fit within defined categories			
\boxtimes	Defined and transparent criteria for projects eligible for Sustainability Bond proceeds		Documented process to identify and manage potential ESG risks associated with the project			
	Summary criteria for project evaluation and selection publicly available		Other (please specify):			
Info	rmation on Responsibilities and Accountability	,				
\boxtimes	Evaluation / Selection criteria subject to external advice or verification		In-house assessment			
	Other (please specify):					
3. N	3. MANAGEMENT OF PROCEEDS					
Ove	Overall comment on section (if applicable):					
Mur port the	nicipality will monitor and track the allocation of folio approach. Árborg is committed to allocat	proc ing n ocate	oceeds is overseen by the Finance department. The seeds through its internal accounting system, using a et proceeds to Eligible Projects within 24 months o and proceeds may be temporarily invested in line with the market practice.			
Trac	cking of proceeds:					
Sustainability Bond proceeds segregated or tracked by the issuer in an appropriate manner						
\boxtimes	Disclosure of intended types of temporary inventoreds	estm	ent instruments for unallocated			
	Other (please specify):					

Second-Party Opinion **Árborg Municipality Sustainable Bond Framework**



Add	itional disclosure	: :			
	Allocations to fo	uture investments only	\boxtimes	Allocatio investme	ns to both existing and future ents
	Allocation to inc	dividual disbursements		Allocatio disburse	n to a portfolio of ments
	Disclosure of pounallocated pro	ortfolio balance of ceeds		Other (pl	ease specify):
4. R	EPORTING				
Ove	all comment on	section (if applicable):			
alloc	ation. In additi	on, Árborg municipality is	con	nmitted to	on its website, on an annual basis, until full o reporting on relevant impact metrics. reporting as aligned with market practice.
Use	of proceeds repo	orting:			
	Project-by-proje	ect	\boxtimes	On a proj	ect portfolio basis
	Linkage to indi	vidual bond(s)		Other (pl	ease specify):
	Inf	ormation reported:			
	⊠	Allocated amounts			Sustainability Bond financed share of total investment
		Other (please specify):			
	Fre	equency:			
	\boxtimes	Annual			Semi-annual
		Other (please specify):			
Impa	act reporting:				
	Project-by-proje	ect	\boxtimes	On a pro	oject portfolio basis
	Linkage to indiv	vidual bond(s)		Other (p	lease specify):
	Inf	ormation reported (expected	or ex	x-post):	
		GHG Emissions / Savings		\boxtimes	Energy Savings
	\boxtimes	Decrease in water use		\boxtimes	Number of beneficiaries
		Target populations			Other ESG indicators (please specify): Green buildings certified

Árborg Municipality Sustainable Bond Framework



	Fre	equency:				
	\boxtimes	Annual		☐ Semi-annual		
		Other (please specify):				
Mea	ns of Disclosure					
	Information pul	olished in financial report		Information published in sustainability report		
	Information pul documents	olished in ad hoc	\boxtimes	 Other (please specify): Standalone Impact Report or as a part of Sustainability report 		
	Reporting revie external review		nich p	n parts of the reporting are subject to		
	Where appropriate, please specify name and date of publication in the useful links section. USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)					
SPE	SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE					
Тур	e(s) of Review pr	ovided:				
	Consultancy (inc	cl. 2 nd opinion)		Certification		
	Verification / Au	dit		Rating		
	Other (please sp	ecify):				
Re	view provide	r(s):	Da	ate of publication:		

ABOUT ROLE(S) OF REVIEW PROVIDERS AS DEFINED BY THE GBP AND THE SBP

- i. Second-Party Opinion: An institution with sustainability expertise that is independent from the issuer may provide a Second-Party Opinion. The institution should be independent from the issuer's adviser for its Sustainability Bond framework, or appropriate procedures such as information barriers will have been implemented within the institution to ensure the independence of the Second-Party Opinion. It normally entails an assessment of the alignment with the Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy, and/or processes relating to sustainability and an evaluation of the environmental and social features of the type of Projects intended for the Use of Proceeds.
- i. Verification: An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or sustainability criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally or socially sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Sustainability Bond proceeds, statement of environmental or social impact or alignment of reporting with the Principles may also be termed verification.

Árborg Municipality Sustainable Bond Framework



- iii. Certification: An issuer can have its Sustainability Bond or associated Sustainability Bond framework or Use of Proceeds certified against a recognised external sustainability standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
- iv. Green, Social and Sustainability Bond Scoring/Rating: An issuer can have its Sustainability Bond, associated Sustainability Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental and/or social performance data, process relative to the Principles, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material sustainability risks.



Disclaimer

Copyright ©2021 Sustainalytics. All rights reserved.

The information, methodologies and opinions contained or reflected herein are proprietary of Sustainalytics and/or its third party suppliers (Third Party Data), and may be made available to third parties only in the form and format disclosed by Sustainalytics, or provided that appropriate citation and acknowledgement is ensured. They are provided for informational purposes only and (1) do not constitute an endorsement of any product or project; (2) do not constitute investment advice, financial advice or a prospectus; (3) cannot be interpreted as an offer or indication to buy or sell securities, to select a project or make any kind of business transactions; (4) do not represent an assessment of the issuer's economic performance, financial obligations nor of its creditworthiness; and/or (5) have not and cannot be incorporated into any offering disclosure.

These are based on information made available by the issuer and therefore are not warranted as to their merchantability, completeness, accuracy, up-to-dateness or fitness for a particular purpose. The information and data are provided "as is" and reflect Sustainalytics` opinion at the date of their elaboration and publication. Sustainalytics accepts no liability for damage arising from the use of the information, data or opinions contained herein, in any manner whatsoever, except where explicitly required by law. Any reference to third party names or Third Party Data is for appropriate acknowledgement of their ownership and does not constitute a sponsorship or endorsement by such owner. A list of our third-party data providers and their respective terms of use is available on our website. For more information, visit http://www.sustainalytics.com/legal-disclaimers.

The issuer is fully responsible for certifying and ensuring the compliance with its commitments, for their implementation and monitoring.

In case of discrepancies between the English language and translated versions, the English language version shall prevail.



About Sustainalytics, a Morningstar Company

Sustainalytics, a Morningstar Company, is a leading ESG research, ratings and data firm that supports investors around the world with the development and implementation of responsible investment strategies. The firm works with hundreds of the world's leading asset managers and pension funds who incorporate ESG and corporate governance information and assessments into their investment processes. The world's foremost issuers, from multinational corporations to financial institutions to governments, also rely on Sustainalytics for credible second-party opinions on green, social and sustainable bond frameworks. In 2020, Climate Bonds Initiative named Sustainalytics the "Largest Approved Verifier for Certified Climate Bonds" for the third consecutive year. The firm was also recognized by Environmental Finance as the "Largest External Reviewer" in 2020 for the second consecutive year. For more information, visit www.sustainalytics.com.



Largest Verifier for Certified Climate Bonds in Deal volume in 2020 & Largest External Review Provider in 2020



Named

2015: Best SRI or Green Bond Research or Rating Firm 2017, 2018, 2019: Most Impressive Second Opinion Provider







